

Special Issue

Space Division Multiplexing Techniques

Message from the Guest Editors

Optical fiber communication is the backbone of the telecommunications infrastructure that supports the internet. As internet demand keeps on increasing, the need for a single fiber to carry more information is crucial. It is very important to find smart solutions to increase the capacity x times in a single fiber by increasing the cost much less than x times. Space division multiplexing (SDM) is viewed to be the most promising solution to meet this criterion. SDM techniques can be categorized as multi-mode fiber (MMF)/few-mode fiber (FMF) transmission, uncoupled-core multi-core fiber (MCF) transmission and coupled-core MCF transmission. We encourage researchers to explore issues including, but not limited to:

- SDM transmission system, including MMF/FMF, uncoupled-core MCF, coupled-core MCF transmission;
- High-performance SDM devices;
- SDM transmitter and receiver system design;
- SDM transmission signal processing algorithm and complexity;
- SDM technique applications in fiber sensing and other fields.

Guest Editors

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Deadline for manuscript submissions

closed (15 July 2024)



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